



Job Loss Analysis

ID No: 2000215

Status: Closed

Original Date: 7 December
2010

Last Review Date:

Organization:

SBU: Richmond Refinery

BU: Process Engineering

Work Type: Technical Process Engineering

Title (Work Activity): Process Engineering Support for an Operating Procedure

Site/Region: Richmond

Reviewers

Reviewers Name	Position	Date Approved
Michelle Johansen	Process Engineering Team Lead and Leader of PED JLA Development Team	6/23/11

Development Team

Development Team Member Name	Primary Contact	Position
Mike McKee	X	FCC BIN Leader
Robbie Richter		Process Engineer
Aaron Sims		Richmond JLA Development Team Leader

Personal Protective Equipment (PPE)	Selected	Comments
Safety Shoes		
Hard Hat		
Safety Glasses		
Fire Resistant Clothing		
Face Shields		
Hearing Protection		
Goggles		
Lifeline/Body Harness		
Air Purifying Respirator		
Supplied Air Respirator - SCBA		
Supplied Respirator		
Welding Hood		
Welding/Pipe Clothing		
Welding Mask/Goggles		
Personal Floatation Device		
Life Vest		
Long pants/trousers		
Long sleeve shirt		
Gloves		
Other		
Safety Cones/Barricades		
Tag-out/Lock-out Equipment		
Safety Vest		
Knee Pads		
Caution Tape		
Back Belt/Support		
Substantial leather footwear		
Winter Clothing		
Safety Footwear		
Proper PPE per your Refinery Guidelines		
Electrical Flash Suit		
Electrical Flash Hood		
Personal Gas Monitor		
High Voltage Gloves		
Lab Coat		
Long pants		

Job Steps

No	Job Steps	Potential Hazard	Critical Actions
1	Determine if procedure requires Technical Support.	1. Adverse affects to plant or personnel because due to lack of technical involvement.	1. Identify and understand applicable procedure from a technical standpoint.
2	Identify a Technical "Control Copy" Procedure to work from.	1. Not working from a "Control Copy" could result in updates and/or changes to the procedure not being captured.	1a. Label the main procedure that the technical support engineer will be working from as "Control Copy". 1b. Ensure Technical Support Control copy is identical to the Operations Control Copy.
3	Identify all critical engineering steps in the procedure.	1. Missing critical step could result in an equipment or personnel loss.	1a. Extract critical engineering steps and insert into a separate document for preparation and tracking purposes. 1b. Update (Red Line, sign and date) both Engineering and Operating procedures with any missing critical steps.
4	Prepare the technical tools needed to support the procedure.	1. Lack of information due to being unprepared to collect data from procedure.	1a. Identify/build applicable PI Process Book, INDX, spreadsheets, and drawing records that are applicable to the technical steps for the procedure. 1b. Determine location for startup support. Ensure Network access and worksite is available for computer/PPE etc. Obtain approval for Operations or building owner if in another location than office. An area close to the Control Room is recommended.
5	Conduct an Engineer and Unit Readiness Check	1. Loss due to misdiagnosis of procedure.	1. Verify critical instruments and analyzers for startup have been identified and are functioning.
6	Ensure there is a line of communications and method established.	1. Loss due to incorrect guidance.	1a. Establish one technical designated point-of- contact. 1b. Ensure Operations and others involved knows how to contact technical point-of-contact. 1c. Ensure point of contact has adequate communication devices (radios, cell phones, etc).

7	Execute and sign off steps in procedure as they are completed on the "Control Copy".	1. If steps are not signed off, on the "Control Copy", steps may be missed and/or repeated.	1a. Check in with Head Operator and routinely check the Operations Control Copy to ensure the responsible person signs each step as the task is completed on the Control Copy. 1b. Look ahead 2-3 hours in procedure to anticipate future issues. 1c. Conduct continuous trend monitoring of procedure steps on own workstation to minimize disruptions to operators. 1d. Track time requirements for critical steps both for future planning of events and to assess areas for timeline improvement.
8	Turn procedure over to relief engineer. If procedure is complete then move to next step of this JLA.	1. On-coming engineer does not know where they are at on the procedure which could result in personal injury, product loss, and time wasted from repeating steps of the procedure.	1a. Enter the last completed step of the procedure into the PED turnover. Include any other areas of concern or importance in the procedure into the turnover. 1b. Enter anything noteworthy of what happened during the current shift. Include pictures, trends, drawings, and any other evidence. 1c. Enter in next technical support steps for what is expected that should be completed by oncoming engineer. 1d. Complete face-to-face turnover to ensure complete understanding. 1e. Consider offsetting technical turnover from operations turnover to ensure continuity of process monitoring.
9	Engineer turns in completed procedure to applicable documentation folder/binder.	1. Loss due to lack of information for troubleshooting, diagnosing, and solving process problems.	1. Locate a secure storage location for the electronic and paper records.
10	Evaluate effectiveness of procedure.	<ol style="list-style-type: none"> 1. Loss due to missing steps from critical procedure. 2. Loss of future engineering time when preparing timelines or schedules. 	<ol style="list-style-type: none"> 1. Conduct a technical plus/delta after procedure use to identify areas for improvement. 2. Track timeline for critical steps to aid in future planning of events.